



# HEARTS

IN THE AMERICAS

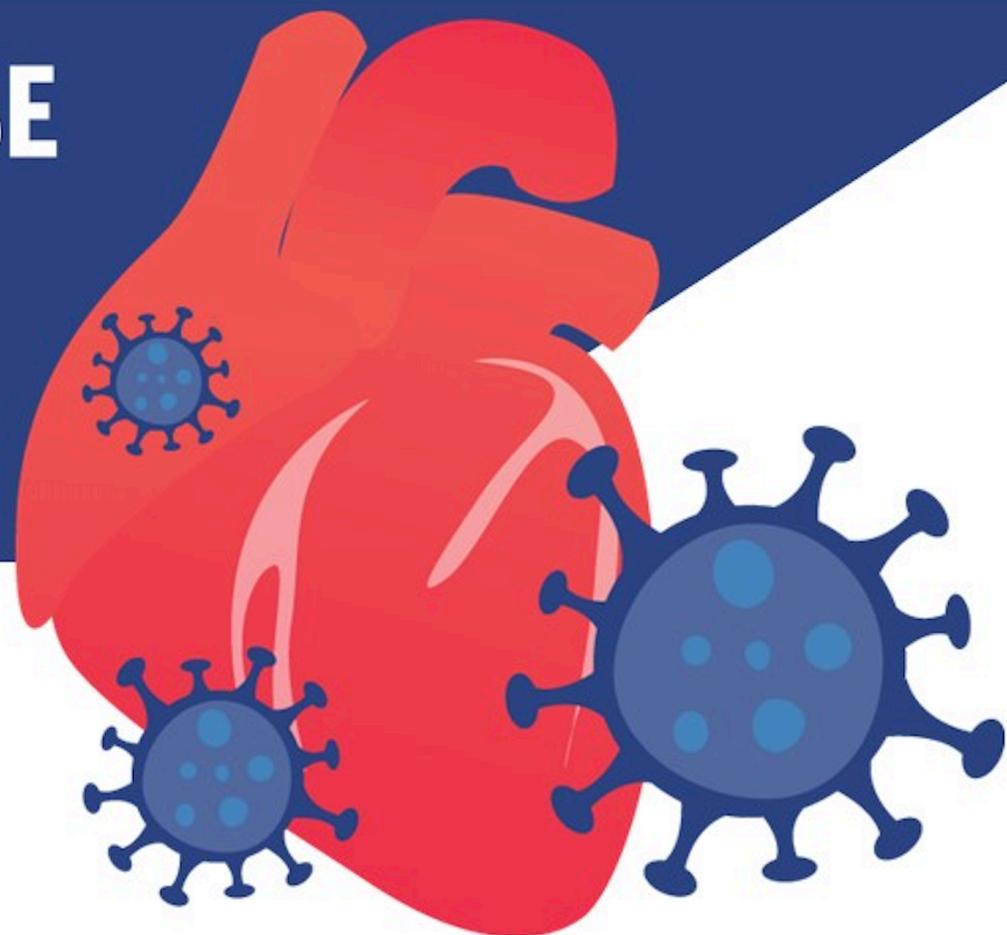


WEBINAR



# CARDIOVASCULAR DISEASE AND COVID-19

Inter-relationship and opportunities for  
change of two global crises



**Monday**

**16 November 2020**

**10:30 am - 12:30 pm (EST)**

[www.paho.org/en/hearts-americas](http://www.paho.org/en/hearts-americas)

**PAHO**



Pan American  
Health  
Organization



World Health  
Organization  
REGIONAL OFFICE FOR THE  
Americas

# Revisión sistemática viva sobre intervenciones para el manejo de pacientes con COVID-19

## Versión 11 - Noviembre 13

Ludovic Reveiz MD, MSc, PhD

Programa Traducción del Conocimiento

Departamento de Evidencia e Inteligencia para la Acción de Salud

Organización Panamericana de la Salud

## Objetivos

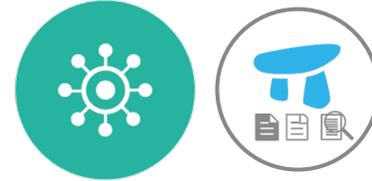
- Recopilar la mejor evidencia sobre tratamientos farmacológicos para pacientes infectados con COVID-19 o expuestos a COVID-19
- Mantener un proceso de actualización permanente con el objetivo de incorporar rápidamente toda nueva información relevante
- Analizar la información obtenida mediante herramientas estandarizadas

## Métodos

- Revisión sistemática rápida
- Cochrane
- Sistema GRADE – por desenlace
- Colaboración / Evaluación

# Búsqueda

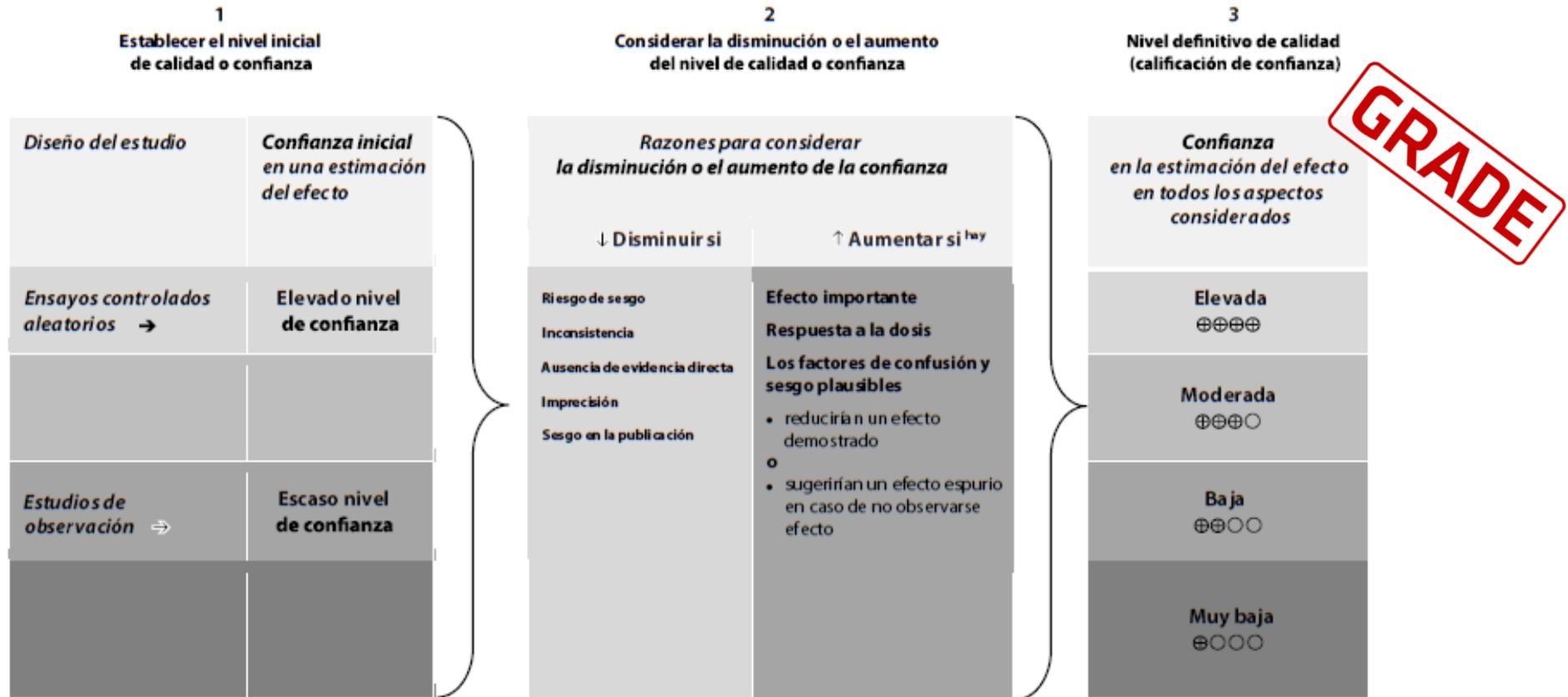
L:VE



## 1 Un repositorio

- Métodos sistemáticos: <https://app.iloveevidence.com/covid19/methods>
- **150,000** registros (artículos examinados 1,5 millones aproximadamente)
- Todo tipo de artículo
- Automatizado: 41 bases de datos + preprints + registros de ensayos
  - Fuentes principales examinadas cada hora (por ejemplo, Pubmed, medRxiv)
- Manual: muchas otras fuentes
- Estudios incluidos en revisiones sistemáticas (procedentes de cualquier fuente)

### Valoración de la evidencia



GRADE: Clasificación de la valoración, elaboración y evaluación de las recomendaciones.

<sup>a</sup> El criterio para mejorar la calidad solamente se aplica a los estudios de observación sin motivo ninguno para reclasificar a un nivel inferior.

## Valoración de la evidencia

Calidad	Características
Alta ⊕⊕⊕⊕	Es muy poco probable que nuevos estudios cambien la confianza que se tiene en el resultado estimado.
Moderada ⊕⊕⊕○	Es probable que nuevos estudios tengan un impacto importante en la confianza que se tiene en el resultado estimado y que estos puedan modificar el resultado.
Baja ⊕⊕○○	Es muy probable que nuevos estudios tengan un impacto importante en la confianza que se tiene en el resultado estimado y que estos puedan modificar el resultado.
Muy baja ⊕○○○	Cualquier resultado estimado es muy incierto.

Intervention	Overall number of studies including the intervention, n=125	Mortality (n of studies)	Invasive mechanical ventilation (n of studies)	Symptom resolution (n of studies)	Prevention of infection (n of studies)	Adverse events (n of studies)
Hydroxychloroquine or Chloroquine	23	7	6	4	6	6
Glucocorticoids	11	10	4	3		6
Lopinavir-Ritonavir	7	3	3	2		1
Convalescent plasma	8	7	3	3		1
Favipiravir	7			3		1
Remdesivir	6	4 (*)	4	3		3
Tocilizumab	5	3	3	3		4
Umifenovir	5					
Ivermectin	4	2	1		1	
Coclicicine	3	1	1			
Mesenchimal cell transplantation	3	1		1		1
Azithromycin	2	2		1		1
Bromhexine Hydrochloride	2	1	1	1		1
Interferon beta-1a	3	2	3		2	
IVIg	2	2	1			1
Leflunomide	2					
Sofosbuvir/Daclatasvir	2	1	1			
Vitamin D	2					
99mTc-MDP	1					
Anticoagulants	1	1				
Aprepitant	1					
Auxora	1	1	1			
Azvodine	1					
Baloxavir	1			1		
Bamlanivimab	1	1		1		1
BCG	1	1				
Cofactors	1			1		1
CIGB-325	1			1		1
Electrolyzed saline	1	1		1		
Darunavir-Cobicistat	1					
Febuxostat	1					
Flebuxamine	1	1	1			1
Icatibant	1	1				
iC1e/K	1	1				
IFN-alpha2b + IFN-gamma	1					
IFX-1	1	1				1
Interferon beta-1b	1	1	1	1		
Interferon beta-1a (inhaled)	1	1	1	1		1
Interferon kappa + TFF2	1	1				1
Lincomycin	1					
N-acetylcysteine	1	1	1			1
Nasal hypertonic saline	1			1		
Nitazoxanide	1			1		
Novaferon	1					
Ozone	1	1				1
Ramipril	1	1			1	
Recombinant Super-Compound IFN	1	1		1		
Ribavirin	1					
Ribavirin + Interferon beta-1b	1					
Ruxolitinib	1			1		
rhG-CSF	1	1		1		1
Telmisartan	1	1	1			
Triazavirin	1	1		1		1
Vitamin C	1	1	1	1		
α-Lipoic acid	1	1				



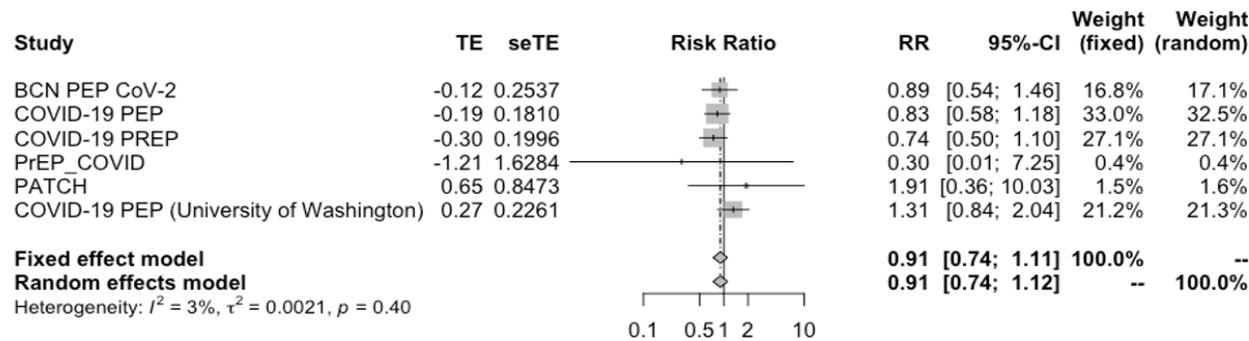
(\*) Inconsistent results between included studies. Beigel et al. informed mortality reduction with remdesivir while WHO SOLIDARITY found no significant differences. Pooled estimates show a small non-statistically significant mortality reduction (RR 0.94, 95%CI 0.82-1.09).

Study; publication status	Patients and interventions analyzed	Comorbidities	Additional interventions	Rob and study limitations	Interventions effects vs standard of care (SOC) and GRADE certainty of the evidence
---------------------------	-------------------------------------	---------------	--------------------------	---------------------------	---

**99mTc-MDP**  
Uncertainty in potential benefits and harms. Further research is needed.

<b>RCT</b>					
Yuan et al. <sup>10</sup> Preprint; 2020	Patients with mild COVID-19 infection. 10 assigned to 99mTc-MDP 5/ml once a day for 7 days and 11 assigned to SOC	Median age 61 ± 20, male 42.9%	NR	High for mortality and invasive mechanical ventilation; High for symptom resolution, infection and adverse events  Notes: Non-blinded study. Concealment of allocation probably inappropriate.	<b>Mortality:</b> No information <b>Invasive mechanical ventilation:</b> No information <b>Symptom resolution or improvement:</b> No information <b>Symptomatic infection (prophylaxis studies):</b> No information <b>Adverse events:</b> No information

Enfermedad sintomática en profilaxis: HCQ vs. no profilaxis



**Summary of findings table 3.** ([Link to interactive version](#))

Population: Patients with COVID-19 infection or exposed to COVID-19

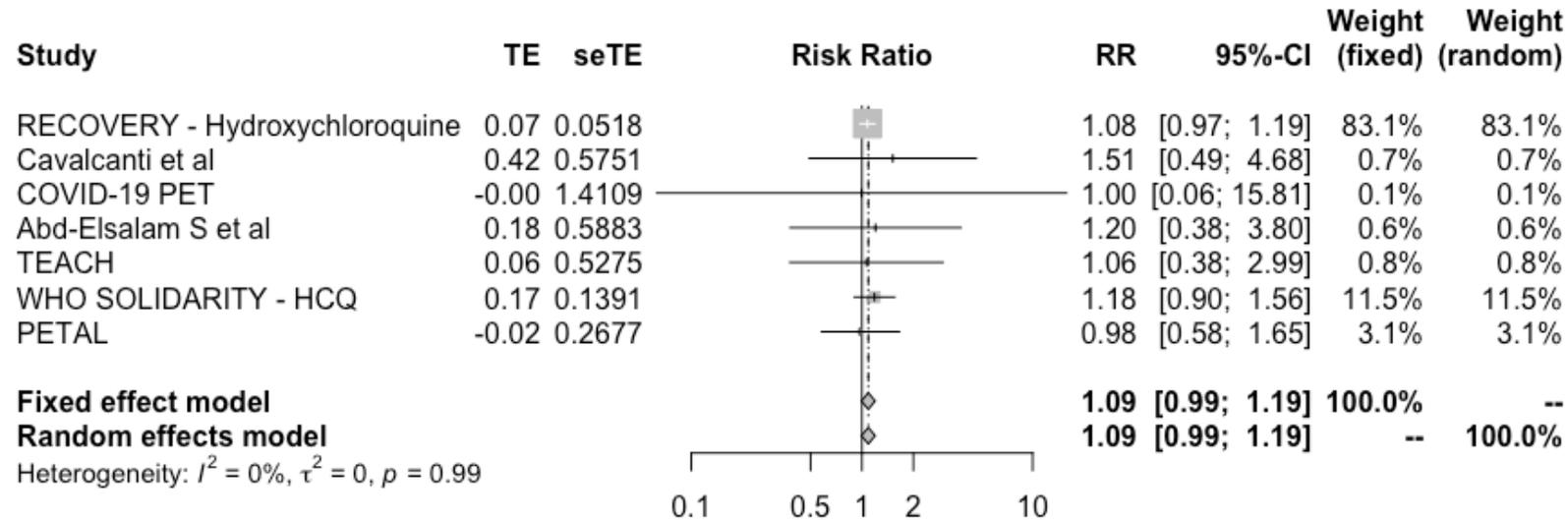
Intervention: Hydroxychloroquine

Comparator: Standard of care

Outcome Timeframe	Study results and measurements	Absolute effect estimates		Certainty of the Evidence (Quality of evidence)	Plain text summary
		SOC	HCQ		
Mortality 15 days	Relative risk: 1.09 (CI 95% 0.99 - 1.2) Based on data from 7824 patients in 6 studies Follow up Median 15 days	<b>330</b> per 1000	<b>360</b> per 1000	<b>Moderate</b> Due to serious risk of bias <sup>1</sup>	HCQ probably increases mortality
		Difference: <b>30 more per 1000</b> (CI 95% 3 fewer - 66 more)			
Mechanical ventilation 15 days	Relative risk: 1.05 (CI 95% 0.99 - 1.22) Based on data from 6607 patients in 5 studies Follow up Median 15 days	<b>116</b> per 1000	<b>122</b> per 1000	<b>Moderate</b> Due to serious risk of bias <sup>2</sup>	HCQ probably has little or no difference on mechanical ventilation
		Difference: <b>6 more per 1000</b> (CI 95% 1 fewer - 26 more)			
Symptom resolution or improvement 28 days	Relative risk: 1.06 (CI 95% 0.93 - 1.22) Based on data from 5308 patients in 3 studies Follow up 28 days	<b>554</b> per 1000	<b>587</b> per 1000	<b>Moderate</b> Due to serious inconsistency <sup>3</sup>	HCQ probably has little or no difference on symptom resolution or improvement
		Difference: <b>33 more per 1000</b> (CI 95% 39 fewer - 122 more)			
COVID-19 infection (in exposed individuals)	Relative risk: 0.91 (CI 95% 0.74 - 1.12) Based on data from 5799 patients in 6 studies	<b>174</b> per 1000	<b>158</b> per 1000	<b>Low</b> Due to serious risk of bias, Due to serious imprecision <sup>4</sup>	HCQ may have little or no difference on covid-19 infection (in exposed individuals)
		Difference: <b>16 fewer per 1000</b> (CI 95% 45 fewer - 21 more)			
Severe adverse events	Relative risk: 1.07 (CI 95% 0.74 - 1.54)	<b>54</b> per 1000	<b>58</b> per 1000	<b>Low</b>	

## Hidroxicloroquina

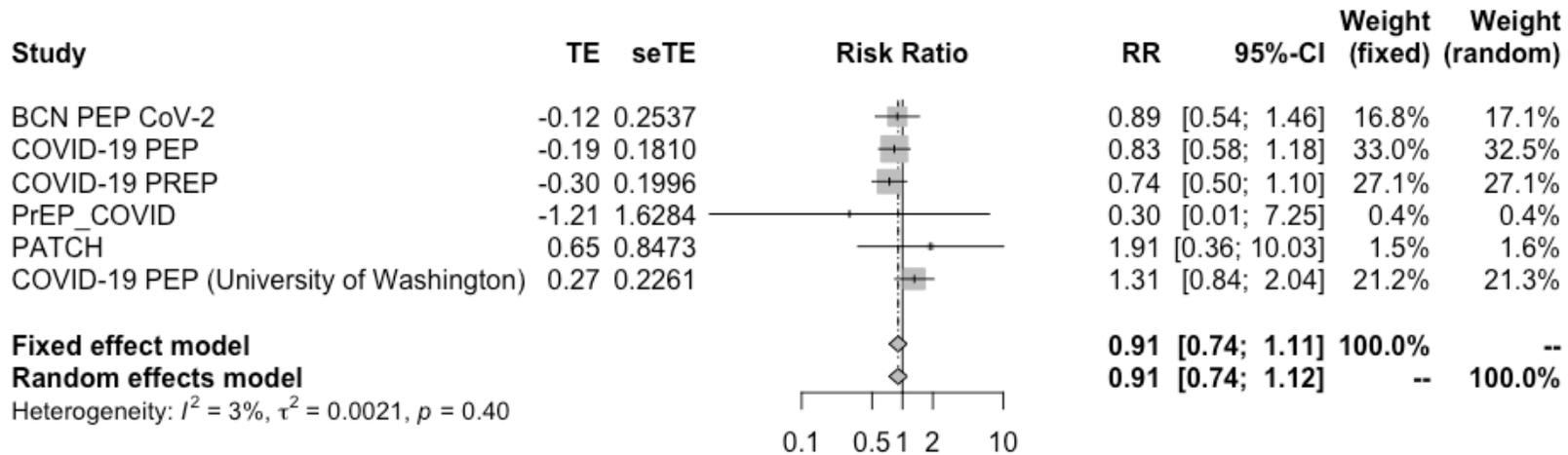
Mortalidad de cualquier causa: HCQ vs. estándar de cuidado



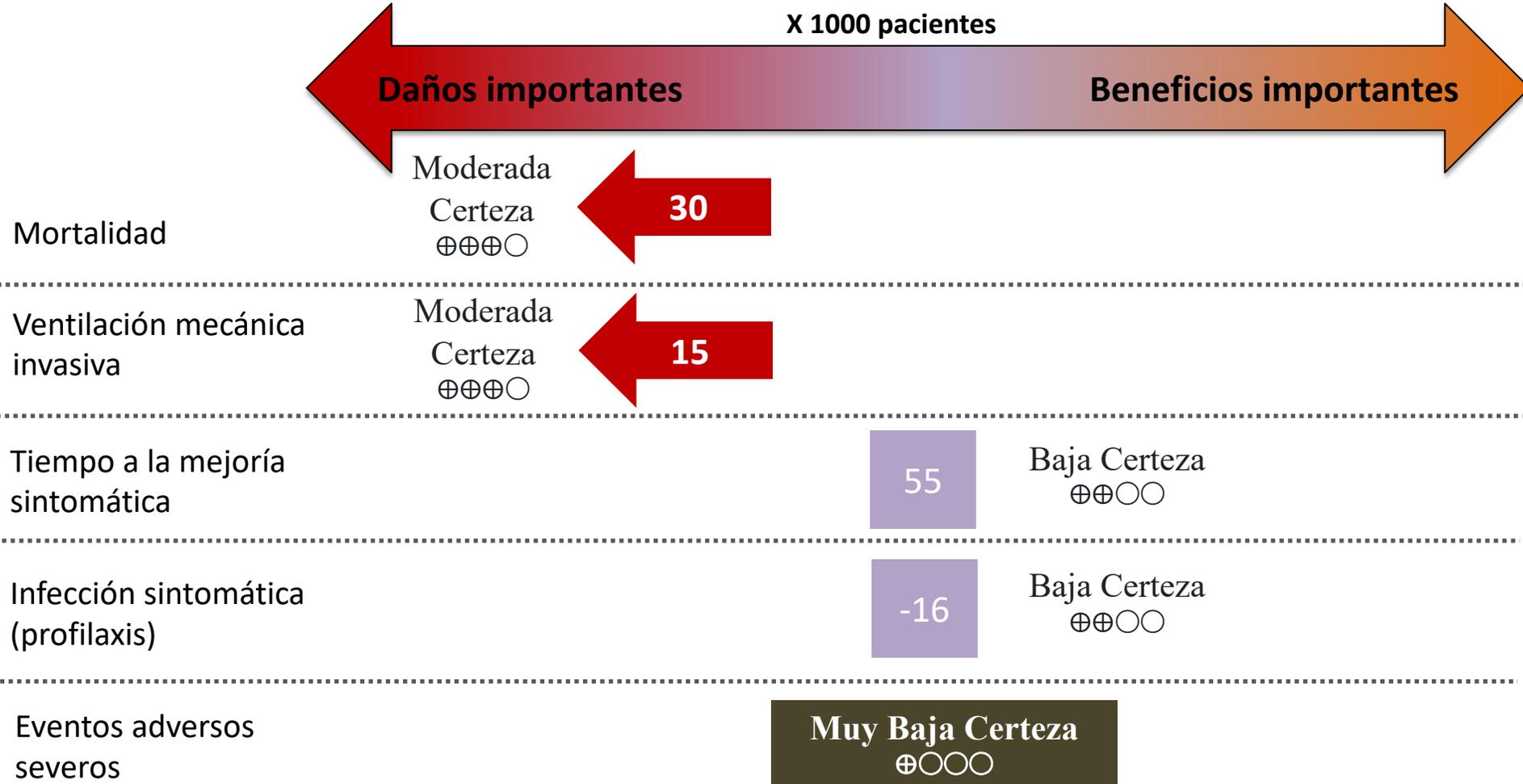
## Hidroxicloroquina

- 6 ERC, 5799 pacientes

Enfermedad sintomática en profilaxis: HCQ vs. no profilaxis



## Hidroxicloroquina



# COVID-19

## GUÍA PARA EL CUIDADO DE PACIENTES ADULTOS CRÍTICOS CON COVID-19 EN LAS AMÉRICAS

Versión 2

Actualizada al 29 de julio del 2020

### NOTA

Este documento incluye los resultados de un proceso de adaptación rápida de guías. La información incluida en esta guía refleja la evidencia a la fecha publicada en el documento. Las recomendaciones se basaron en la evidencia disponible y su calidad (metodología GRADE) en el momento en que se publicó la guía. Sin embargo, reconociendo que hay numerosas investigaciones en curso, la Organización Panamericana de la Salud actualizará de forma periódica estas revisiones y las recomendaciones correspondientes.

# COVID-19

## Flowchart for the management of suspected COVID-19 patients at the first level of care and in remote areas in the Region of the Americas

JULY 2020

### NOTE

This document offers an algorithm for the management of COVID-19 patients at the first level of care and in remote areas, with focus on early case identification based on severity, and timely indications of remission. The flowchart incorporates the results of a process that included a review of the evidence and validation by experts in the Region. It is subject to revision as new evidence becomes available.

# COVID-19

## Ongoing Living Update of Potential COVID-19 Therapeutics: Summary of Rapid Systematic Reviews

RAPID REVIEW, 21 October 2020

### Disclaimer

This document includes the results of a rapid systematic review of current available literature. The information included in this review reflects the evidence as of the date posted in the document. Yet, recognizing that there are numerous ongoing clinical studies, PAHO will periodically update these reviews and corresponding recommendations as new evidence becomes available.